Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

King County Area, Washington

AgC—Alderwood gravelly sandy loam, 6 to 15 percent slopes

Map Unit Setting

Elevation: 50 to 800 feet

Mean annual precipitation: 25 to 60 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 180 to 220 days

Map Unit Composition

Alderwood and similar soils: 95 percent

Minor components: 5 percent

Description of Alderwood

Setting

Landform: Moraines, till plains

Parent material: Basal till with some volcanic ash

Properties and qualities

Slope: 6 to 15 percent

Depth to restrictive feature: 24 to 40 inches to dense material

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 37 inches

Frequency of flooding: None Frequency of ponding: None

Available water capacity: Very low (about 2.5 inches)

Interpretive groups

Land capability (nonirrigated): 4s

Typical profile

0 to 12 inches: Gravelly sandy loam 12 to 27 inches: Very gravelly sandy loam 27 to 60 inches: Very gravelly sandy loam

Minor Components

Norma

Percent of map unit: 1 percent Landform: Depressions

Bellingham

Percent of map unit: 1 percent Landform: Depressions

Seattle

Percent of map unit: 1 percent Landform: Depressions

Tukwila

Percent of map unit: 1 percent Landform: Depressions

Shalcar

Percent of map unit: 1 percent Landform: Depressions

Data Source Information

Soil Survey Area: King County Area, Washington Survey Area Data: Version 6, Sep 22, 2009

King County Area, Washington

AmC—Arents, Alderwood material, 6 to 15 percent slopes

Map Unit Setting

Mean annual precipitation: 35 to 60 inches Mean annual air temperature: 50 degrees F

Frost-free period: 150 to 200 days

Map Unit Composition

Arents, alderwood material, and similar soils: 100 percent

Description of Arents, Alderwood Material

Setting

Landform: Till plains
Parent material: Basal till

Properties and qualities

Slope: 6 to 15 percent

Depth to restrictive feature: 20 to 40 inches to dense material

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 16 to 36 inches

Frequency of flooding: None Frequency of ponding: None

Available water capacity: Very low (about 2.3 inches)

Interpretive groups

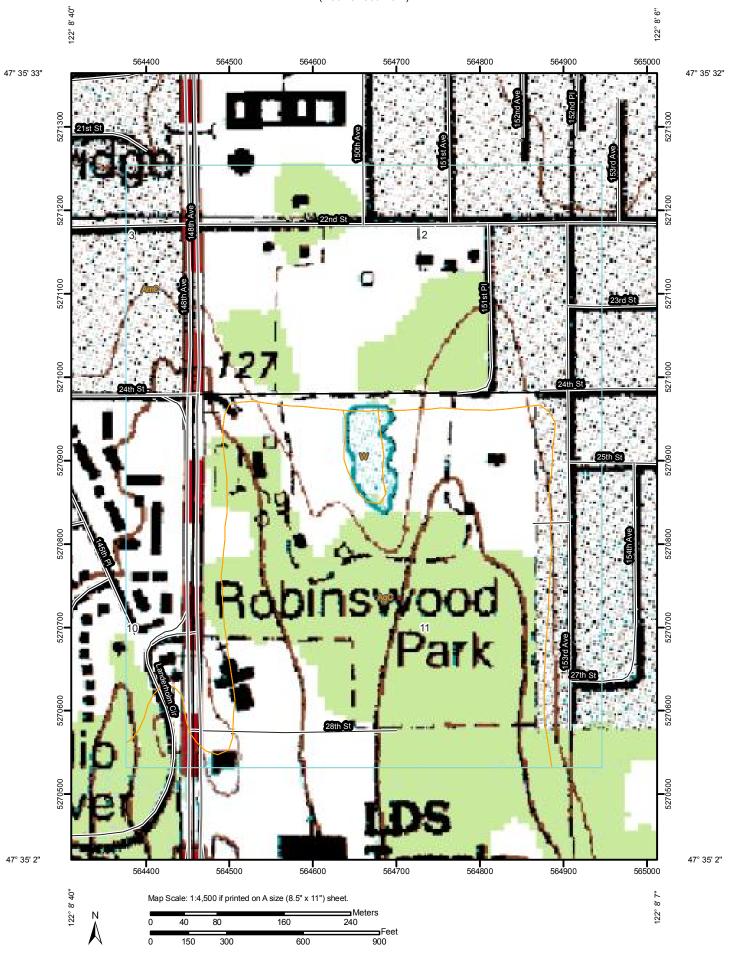
Land capability (nonirrigated): 4s

Typical profile

0 to 26 inches: Gravelly sandy loam 26 to 60 inches: Very gravelly sandy loam

Data Source Information

Soil Survey Area: King County Area, Washington Survey Area Data: Version 6, Sep 22, 2009



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout \odot

X Borrow Pit

* Clay Spot

Closed Depression

× Gravel Pit

Gravelly Spot \sim

Ճ Landfill

Lava Flow

Marsh or swamp

Mine or Quarry 52

Miscellaneous Water ⊚

Rock Outcrop

◉ Perennial Water

Saline Spot

Sandy Spot

Severely Eroded Spot =

Sinkhole ٥

Slide or Slip

Sodic Spot

3 Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

2 Gully

Short Steep Slope

11 Other

Political Features

Cities

PLSS Section

Water Features

Oceans

Streams and Canals

Transportation

+++

Rails



Interstate Highways



US Routes



Major Roads



Local Roads

MAP INFORMATION

Map Scale: 1:4,500 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov

Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: King County Area, Washington Survey Area Data: Version 6, Sep 22, 2009

Map Unit Legend

King County Area, Washington (WA633)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgC	Alderwood gravelly sandy loam, 6 to 15 percent slopes	41.7	41.0%
AmC	Arents, Alderwood material, 6 to 15 percent slopes	59.1	58.0%
W	Water	1.1	1.1%
Totals for Area of Interest		101.9	100.0%